2005 NAIP Survey
Executive Summary
For
Missouri

USDA
Farm Service Agency

Aerial Photography Field Office

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Contents

Section 1

1.0 Introduction

The primary purpose of NAIP is to acquire peak growing season "leaf on" imagery, and deliver this imagery to United States Department of Agriculture (USDA) County Service Centers in order to maintain Common Land Unit (CLU) boundaries and assist with crop compliance and a multitude of other farm programs.

As evidenced by the types of customers requesting NAIP imagery, the imagery has other purposes as well. Although our primary customers are States and County Service Centers, other uses for NAIP imagery, including military, real estate, recreation, planning, etc., cannot be overlooked.

NAIP is a program with a relatively short history, beginning with pilot projects in 2001 and 2002, and moving to full volume acquisition in 2003 to 2005, based on funding and partnering. NAIP is moving out of the research and development phase and into sustainment status. By moving into a sustainment phase, a program can build and evaluate a quality business process, and stabilize. Part of this process is evaluating how NAIP is working for its primary customers.

1.1 Purpose and Scope

The focus of this document is to assess in a qualitative manner how NAIP is satisfying customer needs in Missouri. In other words, "How did APFO do in providing *useful* NAIP imagery for its primary customer?" Answering this question comprises the purpose and scope.

1.2 Survey Submittals

For the initial disposition, the following States were sent surveys to disseminate to County Service Centers for completion: WA, OR, OK, KS, NE, **MO**, IA, MN, WI, IL, IN, OH, CT, and NC. No responses were received from KS or AZ by the 15 Dec 2005 due date. WA noted that they would respond to the survey, but due to imagery delivery/redelivery dates, responses would likely be after 15 Dec.

A second waive of surveys was sent to the following States to disseminate to County Service Centers for completion: CA, CO, MT, ND, SD, TX, LA, MS, AL, GA, FL, SC, VA, MD, PA, MI, RI, and CT. Responses were requested by 17 Feb, and by 9 Mar for select states which received imagery "late". Surveys were accidentally sent to CT twice, however, County Service Centers only responded once. LA noted that they would only be able to get a few Counties to complete the survey by the 9 Mar due date. MI noted they would not be able to participate in the survey because of CIR rework that would be completed after the survey due date. MT noted that due to the late distribution of imagery, surveys would likely be returned after the 9 Mar due date. During the second waive of surveys, no survey responses were received by CO, GA, MI, or AL. Surveys received after 9 Mar 06 were not scored.

Section 2

2.0 Qualitative Evaluation Summary

NAIP Assessment Surveys were provided by email to County Service Centers via the State Office and responses were requested by 15 Dec 05. Out of the responses received, in Missouri, 3101 of a possible 3615 points were achieved, for a weighted average score out of 1.0 of .858, for a rating of 85.8%. Translated into survey terms, this is an overall rating of "Satisfied". The map on the following page graphically represents overall survey results by county. These results indicate that generally the counties that participated in the survey were satisfied with 2005 NAIP and that the products met customer needs most of the time. However, there is room for improvement.

Most textual comments from the survey revolved around color quality/resolution, and timing of imagery acquisition and delivery. Textual comments can be found in the Executive Summary Supplementals 1 and 2. A statistical summary by question of survey results is shown below: Note that Q1-8 are out of a possible 5 points and Q9-10 are out of a possible 10 points. Statistically, the lowest average scoring question was Q7, "Is the imagery useful for government coordination, for example, in communications with other Federal, State or local agencies?" Statistically, the highest scoring question was Q1, "Was the imagery received by your office in time to be useful for crop compliance work?"

Q1		*Q2*		*Q3*		*Q4*		*Q5*	
Mean	4.4375	Mean	4.209677419	Mean	4.278688525	Mean	4.396825397	Mean	4.104166667
Standard Error	0.101757863	Standard Error	0.110613636	Standard Error	0.099537585	Standard Error	0.118748558	Standard Error	0.127160699
Median	5	Median	4	Median	4	Median	5	Median	4
Mode	5	Mode	5	Mode	5	Mode	5	Mode	5
Standard Deviation	0.814062905	Standard Deviation	0.870972638	Standard Deviation	0.777413394	Standard Deviation	0.942537456	Standard Deviation	0.880995166
Sample Variance	0.662698413	Sample Variance	0.758593337	Sample Variance	0.604371585	Sample Variance	0.888376856	Sample Variance	0.776152482
Kurtosis	3.768419791	Kurtosis	1.870307734	Kurtosis	0.748608735	Kurtosis	4.138291353	Kurtosis	-0.540450636
Skewness	-1.705579385	Skewness	-1.196804653	Skewness	-0.976949557	Skewness	-1.959711636	Skewness	-0.599177262
Range	4	Range	4	Range	3	Range	4	Range	3
Minimum	1	Minimum	1	Minimum	2	Minimum	1	Minimum	2
Maximum	5	Maximum	5	Maximum	5	Maximum	5	Maximum	5
Sum	284	Sum	261	Sum	261	Sum	277	Sum	197
Count	64	Count	62	Count	61	Count	63	Count	48

Q6		*Q7*		*Q8*		*Q9_X2*		*Q10_X2*	
Mean	4.366666667	Mean	4.018867925	Mean	4.166666667	Mean	8.634920635	Mean	8.761904762
Standard Error	0.091955119	Standard Error	0.148750397	Standard Error	0.132696218	Standard Error	0.191072628	Standard Error	0.199479976
Median	4	Median	4	Median	4.5	Median	8	Median	10
Mode	5	Mode	5	Mode	5	Mode	10	Mode	10
Standard Deviation	0.712281288	Standard Deviation	1.082919239	Standard Deviation	1.027860484	Standard Deviation	1.51659197	Standard Deviation	1.583323227
Sample Variance	0.507344633	Sample Variance	1.172714078	Sample Variance	1.056497175	Sample Variance	2.300051203	Sample Variance	2.506912442
Kurtosis	0.772854227	Kurtosis	1.447724117	Kurtosis	0.537248885	Kurtosis	1.11170568	Kurtosis	0.989664757
Skewness	-0.96478402	Skewness	-1.266052236	Skewness	-1.121259777	Skewness	-1.068503465	Skewness	-1.205001854
Range	3	Range	4	Range	4	Range	6	Range	6
Minimum	2	Minimum	1	Minimum	1	Minimum	4	Minimum	4
Maximum	5	Maximum	5	Maximum	5	Maximum	10	Maximum	10
Sum	262	Sum	213	Sum	250	Sum	544	Sum	552
Count	60	Count	53	Count	60	Count	63	Count	63

2005 NAIP - Overall Qualitative Survey Results